

AMENDMENTS TO THE CLAIMS

Please amend claims 1, 3, and 11 as indicated below:

1. + (Currently amended) An isolated peptide which binds antibodies that are found in elevated levels in body fluids of schizophrenic patients, wherein said isolated peptide comprises a sequence of SEQ ID NO: 1, wherein

Xaa(1) is S, I, A, D, or absent;

Xaa(2) is G, A, D, or absent;

Xaa(3) is E, D, or absent;

Xaa(4) is T or absent;

Xaa(5) is E or absent;

Xaa(6) is D or absent;

Xaa(7) is T or absent;

Xaa(8) is F or absent;

Xaa(9) is I or absent;

Xaa(10) is A or absent;

Xaa(11) is D or absent;

Xaa(19) is C, G, or P;

Xaa(25) is A or P;

Xaa(26) is P or A; and

Xaa(28) is R or absent,

provided that Xaa(25) and Xaa(26) are taken together to

form a sequence selected from the group consisting of AP
and PA formula I:

~~*₁LVVGLCTX₂QIKTGX₃CX₄~~

— wherein X_1 is selected from the group consisting of SGETEDTFIAD, IAD, AD, D, and a bond/hydrogen;

— X_2 is selected from the group consisting of C, G, and P;

— X_3 is selected from the group consisting of AP, and PA; and

— X_4 is selected from the group consisting of R, and a bond/hydrogen.

2. (Canceled)

3. (Currently amended) An isolated peptide according to claim 1, which binds antibodies that are capable of binding to a peptide, wherein said isolated peptide is selected from the group consisting of:

- a. SGETEDTFIADLVVGLCTGQIKTGAPCR (SEQ ID NO: 2) ~~(SEQ ID NO: 1)~~;
- b. LVVGLCTCQIKTGPAC (SEQ ID NO: 3) ~~(SEQ ID NO: 2)~~;
- c. IADLVVGLCTGQIKTGAPCR (SEQ ID NO: 4) ~~(SEQ ID NO: 3)~~;
- d. ADLVVGLCTGQIKTGAPCR (SEQ ID NO: 5) ~~(SEQ ID NO: 4)~~;
- e. DLVVGLCTGQIKTGAPCR (SEQ ID NO: 6) ~~(SEQ ID NO: 5)~~;
- f. LVVGLCTGQIKTGAPCR (SEQ ID NO: 7) ~~(SEQ ID NO: 6)~~;
- g. LVVGLCTGQIKTGPACR (SEQ ID NO: 8) ~~(SEQ ID NO: 7)~~; and
- h. LVVGLCTPQIKTGPACR (SEQ ID NO: 9) ~~(SEQ ID NO: 8)~~.

4-6. (Canceled)

7) (Previously presented) An isolated peptide according to claim 1 which binds antibodies that are found in elevated levels in body fluids of schizophrenic patients, said isolated peptide comprising at least one antigenic epitope, said epitope having a cyclic three dimensional structure consisting of a hydrophobic core and a positively charged extension.

8) (Previously presented) An assay for the diagnosis of schizophrenia in an individual, comprising the following steps:

- a. obtaining a sample from said individual being a blood sample, a platelet-containing fraction thereof, or a fraction containing platelet-associated antibodies (PAA) shed from the platelets;
- b. contacting said sample with an isolated peptide according to claim 1;
- c. determining the level of binding of said peptide to said sample, a level higher than the binding level of said peptide to a sample from non-schizophrenic individuals indicating that said individual has a high likelihood of having schizophrenia.

9-10. (Canceled)

11. + (Currently amended) An assay according to claim 8, wherein the isolated peptide in step (b) is an isolated peptide selected from the group consisting of

- a. SGETEDTFIADLVVGLCTGQIKTGAPCR (SEQ ID NO: 2) ~~(SEQ ID NO: 1)~~;
- b. LVVGLCTCQIKTGPAC (SEQ ID NO: 3) ~~(SEQ ID NO: 2)~~;
- c. IADLVVGLCTGQIKTGAPCR (SEQ ID NO: 4) ~~(SEQ ID NO: 3)~~;
- d. ADLVVGLCTGQIKTGAPCR (SEQ ID NO: 5) ~~(SEQ ID NO: 4)~~;
- e. DLVVGLCTGQIKTGAPCR (SEQ ID NO: 6) ~~(SEQ ID NO: 5)~~;
- f. LVVGLCTGQIKTGAPCR (SEQ ID NO: 7) ~~(SEQ ID NO: 6)~~;
- g. LVVGLCTGQIKTGPACR (SEQ ID NO: 8) ~~(SEQ ID NO: 7)~~; and
- h. LVVGLCTPQIKTGPACR (SEQ ID NO: 9) ~~(SEQ ID NO: 8)~~.

12. (Canceled)

13. (Previously presented) An assay in accordance with claim 8, wherein said sample obtained from the individual is a whole blood sample.

14. (Previously presented) A kit for use in the diagnosis of schizophrenia comprising:

- a. a support comprising one or more isolated peptides in accordance with claim 1 immobilized onto it;
- b. an anti-human immunoglobulin antibody or fragment thereof which maintains the binding characteristics of

the whole antibody, said antibody or fragment thereof
conjugated to a detectable marker;

- c. reagents required for carrying out the assay, and;
- d. instructions for use.